

Reasons for Requesting Review

A. Neither Daniel Câmara et al., “A GPS/Ant-like Routing Algorithm for Ad Hoc Networks”, IEEE, XP010532722 (hereinafter “Câmara”), U.S. Patent No. 6,292,671 to Mansour et al. (hereinafter “Mansour”), U.S. Patent Application Publication No. 2003/0081586 to Malladi et al. (hereinafter “Malladi”), nor U.S. Patent Application Publication No. 2005/0282554 to Shyy et al. (hereinafter “Shyy”) teaches, discloses, or suggests “determining a route for the connection at a central routing device based on the positional information,” where the positional information is “on the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14. Câmara, in fact, has no “central routing device” at all. Câmara, rather, uses the location information to reduce the number of routing *messages*, as noted graciously by the Examiner in section 2 of the final Office Action, at the top of page 3, not for “determining a route for the connection at a central routing device.”

The GPSAL algorithm of Câmara, moreover, is based on GPS and mobile software agents modeled on *ants*, not on the positional information of mobile stations, as described in the first full paragraph of the second column at page 1232. Since the GPSAL algorithm of Câmara is based on GPS and mobile software agents modeled on *ants*, Câmara is not “determining a route for the connection at a central routing device based on the positional information,” where the positional information is “on the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14.

The GPSAL algorithm of Câmara, moreover, is based on the physical location of the *destination* node and mobile software agents modeled on *ants*, as described in the second full paragraph of the second column at page 1233, not “on the positional information” of “the first mobile station, the second mobile station and the further mobile station,” as recited in claim 14. Since the GPSAL algorithm of Câmara is based on the physical location of the destination node and mobile software agents modeled on *ants*, Câmara is not “determining a route for the connection at a central routing device based on the positional information,” where the positional information is “on the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14.

The routing protocol of Câmara, moreover, is based on the physical location of the *destination* host *d* stored in the routing table, as described in the last partial paragraph of

the first column at page 1234, not "on the positional information" of "the first mobile station, the second mobile station and the further mobile station," as recited in claim 14. Since the routing protocol of Câmara is based on the physical location of the destination host d stored in the routing table, Câmara is not "determining a route for the connection at a central routing device based on the positional information," where the positional information is "on the first mobile station, the second mobile station and the further mobile station," as recited in, for example, claim 14.

Mansour is not "determining a route for the connection at a central routing device based on the positional information," where the positional information is "on the first mobile station, the second mobile station and the further mobile station" either, and thus cannot make up for the deficiencies of Câmara with respect to claim 14.

The Examiner asserts in section 5 of the final Office Action, in the first full paragraph at age 10, that:

The Camara's invention is to create a routing table based upon **destination's location and mobiles location.**

There is no basis for this assertion. Câmara, rather, is providing a routing algorithm which is based on GPS and mobile software agents modeled on ants, as described in the Abstract. Câmara is a scholarly article, and does not need to fulfill the requirements of 35 USC § 112, for example. The Examiner is reading utility into Câmara that is not there.

The Examiner goes on to assert in section 5 of the final Office Action, in the second full paragraph at page 10, that:

In page 1232, Camara discloses that the system (an ant agent) collects all nodes position.

This is unsupported. Nowhere at page 1232 does Câmara describe an ant agent as collecting all of the nodes' positions. While an ant agent of Comerica has a responsibility of collecting and disseminating the information about the nodes positions, as described in the second column at page 1232, that does not amount to collecting all of the nodes' positions, contrary to the Examiner's assertion. An ant, moreover, from which the algorithm is modeled, would only know its local area too. Thus, the Examiner's assertion

that the ant agent of Câmara collects all of the nodes' positions is unsupported.

The Examiner goes on to assert in section 5 of the final Office Action, also in the second full paragraph at page 10, that:

Moreover, in page 1233, Camara discloses that all mobiles (includes a source mobile 511 and 512) participate in a MNET have to provide their location information to the system.

This is also unsupported by the Câmara reference. While the mobile hosts participating in a Mamet are assumed to have a GPS unit which provides its approximate position to the host, as described at the item of the second column of page 1233, this does not amount to all of the mobiles having to provide their location information to the system, let alone "determining a route for the connection at a central routing device based on the positional information," where the positional information is "on the first mobile station, the second mobile station and the further mobile station," as recited in, for example, claim 14.

The Examiner goes on to assert in section 5 of the final Office Action, in the third full paragraph at page 10, that:

Therefore, when the source mobile requests the routing table for transmitting packet to the destination mobile, the source mobile and destination mobile exchange mobiles location information (mobiles location) in MNET.

Since, as noted by the Examiner, the source mobile and destination mobile *exchange* mobiles location information, Câmara is not "determining a route for the connection at a central routing device based on the positional information," where the positional information is "on the first mobile station, the second mobile station and the further mobile station," as recited in, for example, claim 14.

The Examiner goes on to assert in section 5 of the final Office Action, also in the third full paragraph at page 10, that:

Once the exchanged is completed, the packet transfers from mobile (node) to mobile (node) until it reaches the destination mobile (node).

Since, as noted by the Examiner, the packet transfers from mobile to mobile once

the *exchange* is completed, Câmara is not “determining a route for the connection at a central routing device based on the positional information,” where the positional information is “on the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14.

The Examiner, finally, asserts in section 5, also in the third full paragraph at page 10, that:

Based upon the source mobile, destination mobile and mobiles location, it determines and generates a routing path for transferring packet from the source mobile to the destination mobile.

Since, as noted by the Examiner, Câmara generates a routing path based upon the source mobile, destination mobile and mobiles location, Câmara is not “determining a route for the connection at a central routing device based on the positional information,” where the positional information is “on the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14.

Consequently, even if Câmara and Mansour were combined as proposed by the Examiner, claim 14 would not result.

B. Neither Câmara, Mansour, Malladi, nor Shyy is “transmitting the routing information from the routing device to the first mobile station, the second mobile station and the further mobile station,” as recited in, for example, claim 14. The Examiner acknowledges this deficiency with respect to Câmara in section 2 of the final Office Action, in the first full paragraph at page 3, and attempts to compensate for it by combining Câmara with Mansour, asserting in the second full paragraph at page 3 that:

In an analogous art, Mansour discloses transmitting the routing information from the routing device to the first mobile station, the second mobile station and the further mobile station (col. 6, lines 38-65. Mansour discloses that the DAP then determines the status and current location of each destination mobile phone in the talk-group by sending a status and location query to the HLR 30 via the STP 26. The DAP 76 then signals the BTS 14 via the MSC 24 to provide voice channels to the originating mobile phone 48 and the destination phones 50, 52, 54, 56).

Neither determining the status and current location of each destination mobile

phone in the talk-group by sending a status and location query to the HLR 30 via the STP 26, nor signaling the BTS 14 via the MSC 24 to provide voice channels to the originating mobile phone 48 and the destination phones, however, amounts to "transmitting the routing information from the routing device to the first mobile station, the second mobile station and the further mobile station," as recited in, for example, claim 14.

Since, in Mansour rather, the DAP 76 determines the status and current location of each destination mobile phone in the talk-group by sending a status and location query to the HLR 30 via the STP 26 as noted in the final Office Action, Mansour has no need for "transmitting the routing information from the routing device to the first mobile station, the second mobile station and the further mobile station," as recited in, for example, claim 14. Consequently, even if Câmara and Mansour were combined as proposed by the Examiner, claim 14 would not result.

The Examiner, in any case, asserts further in section 2 of the final Office Action, at the bottom of page 3, that:

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile host of Daniel Camara et al. by specifically including transmitting the routing information from the routing device to the first mobile station, the second mobile station and the further mobile station, as taught by Mansour, the motivation being in order to route voice packet to each mobile station.

Câmara, however, already routes voice packets to each mobile station. Câmara in fact, is directed to a routing algorithm for a network of mobile hosts that can communicate with each other, as described in the second full paragraph of the first column at page 1232. Câmara is complete in itself. It is submitted, therefore, that persons of ordinary skill in the art who read Câmara at the time the invention was made would not have been motivated to modify Câmara as proposed by the Examiner, since Câmara already routes voice packets to each mobile station. Claim 14 is submitted to be allowable. Withdrawal of the rejection of claim 14 is earnestly solicited.

The rejection of claims 15-33 out to be withdrawn for substantially similar reasons.